

# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Lauren M. Weetman

**Project Number** 

**J2132** 

## **Project Title**

# **Stop the Tears!**

### **Abstract**

# **Objectives/Goals**

The objective of my project was to determine which method of chopping onions caused the least amount of tears and/or discomfort to the test subjects.

#### Methods/Materials

My materials were: forty, medium, white onions of the same variety, five sharp, steak knives, five bowls of water with one litre of water in them each, five pairs of Speedo swimming goggles, a freezer, a loaf of Fresh and Easy white bread, seventy-five paper towels, five girls, age twelve, a table, and five plates.

I had five girls chop five half-onions each: a control group, one with bread in their mouths, one onion while wearing goggles, one that had been in water for five minutes, and an onion that had frozen for ten minutes; then they logged how uncomfortable they were on a visual pain scale. The duration for chopping for each test was 90 seconds.

#### Results

The result was that the watered onion was the least uncomfortable to chop. The onion with the bread in the subject's mouth was the most uncomfortable to chop.

## **Conclusions/Discussion**

Therefore, the watered onion is the best to use while chopping to minimize discomfort.

## **Summary Statement**

My project was to determine the best method of not crying while chopping onions.

## Help Received

My parents helped prepare the onions and supervise the subjects while they were chopping the onions because of the use of knives.